



## THE CITY OF SAN DIEGO MANAGER'S REPORT

DATE ISSUED: May 27, 2004

REPORT NO. 04-116

ATTENTION: Honorable Mayor and City Council

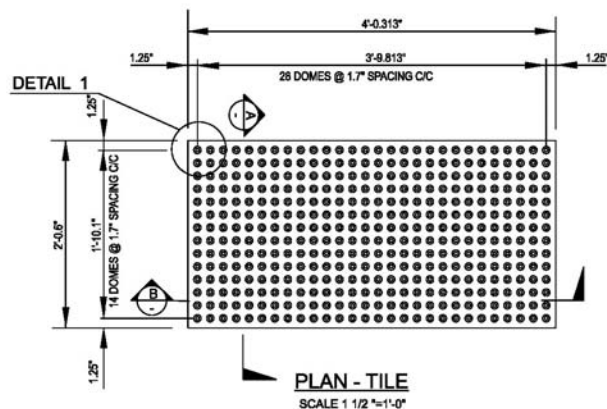
SUBJECT: Implementation of Truncated Domes

### SUMMARY

THIS IS AN INFORMATION ITEM ONLY. NO ACTION IS REQUIRED ON THE PART OF THE COMMITTEE OR THE CITY COUNCIL.

### BACKGROUND

The Americans with Disabilities Act (ADA) requires detectable warnings (truncated domes) on hazardous vehicular ways, transit platform edges, and curb ramps. This provision was originally adopted in 1991, but a suspension was imposed for detectable warning devices at curb ramps to conduct research on the performance of their detectability. The Department of Justice (DOJ) continued the suspension through July 26, 2001. The research determined that designs such as grooves and exposed aggregate, some of which are in the current City's standard design for curb ramps, were not detectable in the sidewalk and roadway environment because of similarities to other surface textures and defects. According to the research, truncated domes have a unique design that can be detected underfoot and with a cane. The research concluded that these other surfaces are not considered ADA equivalent and therefore, do not comply with the ADA requirements. Thus, truncated domes were determined to be the only acceptable detectable warning, under the ADA (See diagram above).



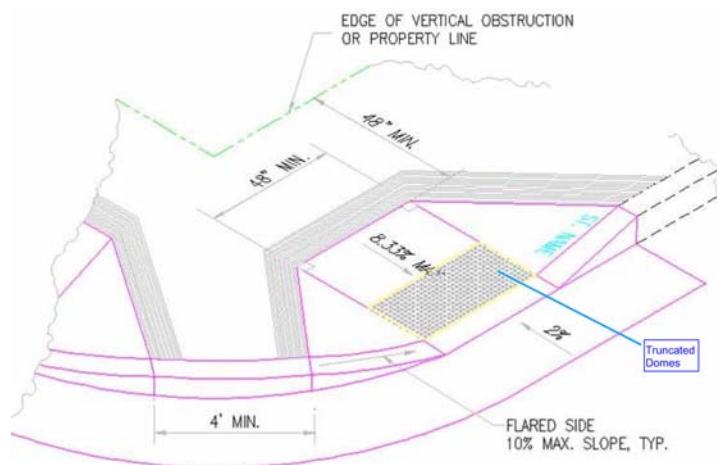
California requirements differ from the federal standards. The California Building Code [CBC] requires detectable warnings such as a half-inch lip beveled at 45 degrees as a detectable way-finding edge for persons with visual impairment, slip-resistant contrasting finish and a 12-inch grooved border at the level surface of the sidewalk. Truncated domes as a detectable warning are required only when the curb ramp slope is flatter than 1:15 (i.e. 1 inch vertical for every 15 inches horizontal) or 6.7% slope.

## DISCUSSION

Due to the difference between the state and federal law regarding acceptable detectable warnings and questions about whether truncated domes provided greater accessibility and usability for our community, the City decided to solicit feedback from our communities before making a final design decision. This approach was similar to the one taken by the City of Denver, Colorado.

In our follow-up conversations with the City of Denver, we learned that Denver abandoned their approach as they were told that federal funding they were to receive may be withheld if they do not comply. Additionally, at various seminars attended by staff, representatives of the Access Board, an independent Federal agency appointed by the President of the United States responsible for developing and enforcing the accessibility standards of the ADA, have reiterated the federal government's position that truncated domes must now be used. Accordingly, many jurisdictions including the following California cities and agencies have fully implemented truncated domes on their curb ramps by making it a requirement of both public and private projects: The California Department of Transportation (Caltrans), Cities of Los Angeles, Marin, Oakland, Sacramento San Francisco, San Jose, San Rafael, Roseville, and Marin County.

The U.S. Department of Transportation's Federal Highway Authority Board and the State's Department of Transportation have both sent memorandums to cities that all curb ramp construction and alteration projects must incorporate the truncated domes found in the draft Americans with Disabilities Act Accessibility Guidelines [ADAAG] for public rights-of-way. See U.S. Department of Transportation Memorandum dated May 6, 2002, as Attachment 1. A typical design standard is depicted hereto.



The revised standard curb ramp standard and specifications will be released for immediate distribution when they are approved by the Citywide Access Law Technical

Group, probably in June 2004. In the interim, the City's Field Division will provide construction guidance as to how to add this feature to curb ramps being constructed. Additionally, the Citywide Access Law Technical Group recently formed a curb ramp committee to address issues and provide assistance in the design and construction of the new standard.

In the meantime, we are requiring truncated domes on all curb ramps installed from here on forward which will add approximately \$200 to the cost of each ramp. Those curb ramps which pre-date the requirements will be included in the City's Transition Plan and become part of the curb-ramp replacement program. The curb ramps between July 26, 2001 and now are under discussion as to the best approach to retrofitting them. Upon a resolution to this issue, likely prior to the end of June, a later memorandum will be issued.

## CONCLUSION

The detectable warning using truncated domes is being implemented on all curb ramps construction effective immediately.

Respectfully submitted,

Frank Belock, Jr.  
Director  
Engineering and Capital Projects

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Development Services

Approved by: Richard Mendes  
Deputy City Manager

BELOCK/OSKOU/FC

Note: The attachment is not available in electronic format. A copy is available for review in the Office of the City Clerk.

Attachment: 1. Information: ADAAG Detectable Warnings (Truncated Domes)/ US Dept. of Transportation Memorandum, May 6, 2002